

Work Order ID 133700

Tuesday, June 16, 2015 10:37:40 AM

133700

Page 1

Item ID: D3447-9

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Swing Arm

Start Date: 6/16/2015 Start Qty: 16.00

16

Cust Item ID:

Required Date: 6/16/2015 Req'd Qty: 16.00

16

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: JUN 16 2015

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3447	Rev A								
100	BAND SAW	0.00							
100									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	Cut blanks: 1.500" x 1.500" x 8.400" long								
110	HAAS CNC VERTICAL MACHINING #1	0.01							
110									
HAAS 1	Memo	0.07							
HAAS CNC vertical machine #1	Machine as per Folio FA544 and Dwg B67-43001 Identify as D3447-9 Dwg								
	Rev ☐ Folio Rev ☐ Deburr								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.00							
Quality Control									

Cancelled

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
Root Cause				FAULT CATEGORY																					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐															
OTHER : ☐																									

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Page 2

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N900040100Setup Start ***NS1***

Revision ID:

Item Name: Swing Arm

Stop ***NS2***

Start Date: 6/16/2015 Start Qty: 16.00

16

Cust Item ID:

Required Date: 6/16/2015 Req'd Qty: 16.00

16

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							
130									
QC	Memo	0.01							
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00							
Hand Finishing									
150	Green Sandtex(Ref:4.3.5.8) per QSI005 4.3	0.00							
150									
Powdercoat	Memo	0.01							
Powder Coating	Mask inside holes as per Dwg D3447 prior to painting								
	TIME: OVEN TEMPERATURE:								
	FINISH TIME:								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
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133700

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Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Swing Arm

Stop *NS2*

Start Date: 6/16/2015 **Start Qty:** 16.00

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Cust Item ID:

Required Date: 6/16/2015 **Req'd Qty:** 16.00

16

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location:_____

0.00

170

Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00

1 20

QC

Memo

0.03

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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								Lead hand / Supervisor Approval Verification	
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Tuesday, June 16, 2015 10:37:43 AM

Page 1

Work Order ID: 133700

133700

Parent Item: D3447-9

D3447-9

Parent Item Name: Swing Arm

Start Date: 6/16/2015

Required Date: 6/16/2015

Start Qty: 16.00

Required Qty: 16.00

Comments: IPP A05.08.26New issueKJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6B1.500X1.500		Purchased	No			100	f	24.7500	0.7	12			
M7075T6R1 500X1 500									**				
7075 T6 BAR 1.500 x 1.500													

Location

Loc Qty

Loc Code

MAT006

24.75

M129891

9

M130312

2

M131357

13.75

DQA: _____ Date: _____

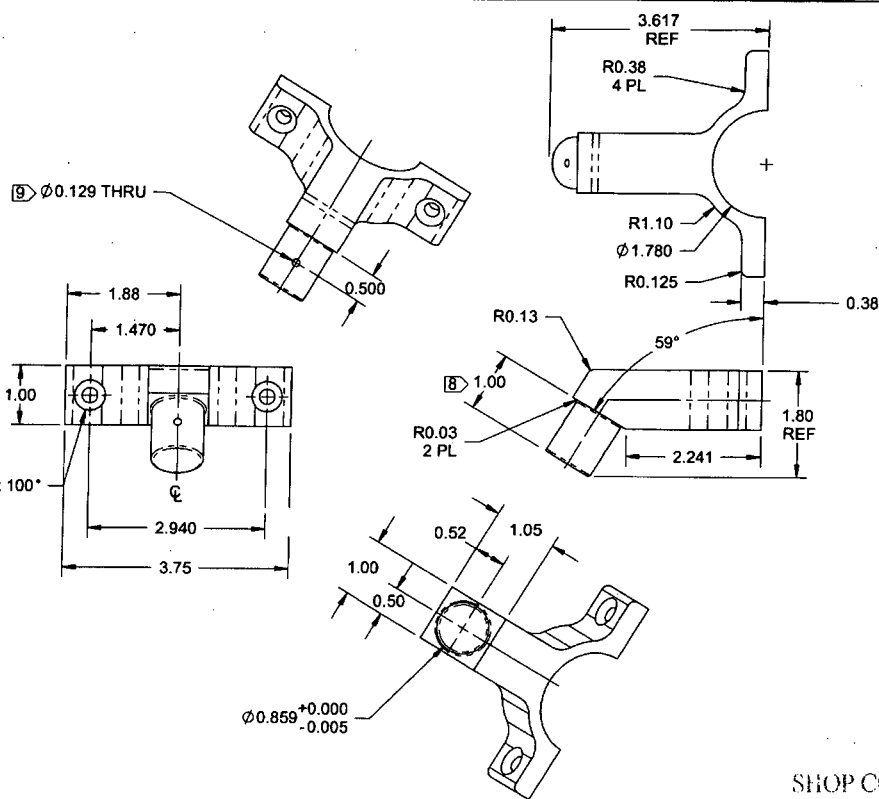


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Misaligned/off center ☐	Turning Sequence ☐																																																																																										
OTHER : ☐																																																																																											

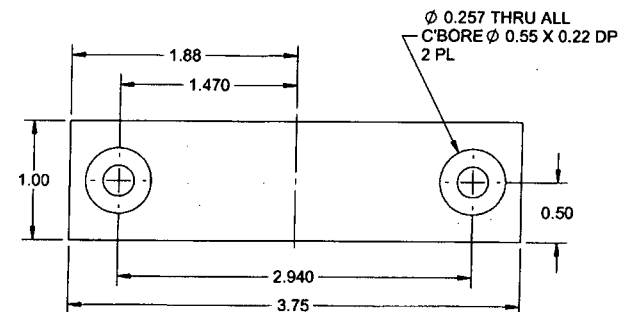


D3440-1 TUBE GUIDE
SUPERSEDES PREMIER P/N B67-43001-25/-307

D3440-1/-3 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR PER AMS/QT-A/200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B221
REF. DART SPEC. M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT PAINT GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH P/N D3440-X PER DART QSI 044 6.1
- 7) WEIGHT: D3440-1=0.35 lb
D3440-3=0.11 lb
- 8) MASK BEFORE PAINTING.
- 9) DRILL HOLE AT ASSEMBLY.

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WORK ORDER
NO. 133700 MLW
1506-16

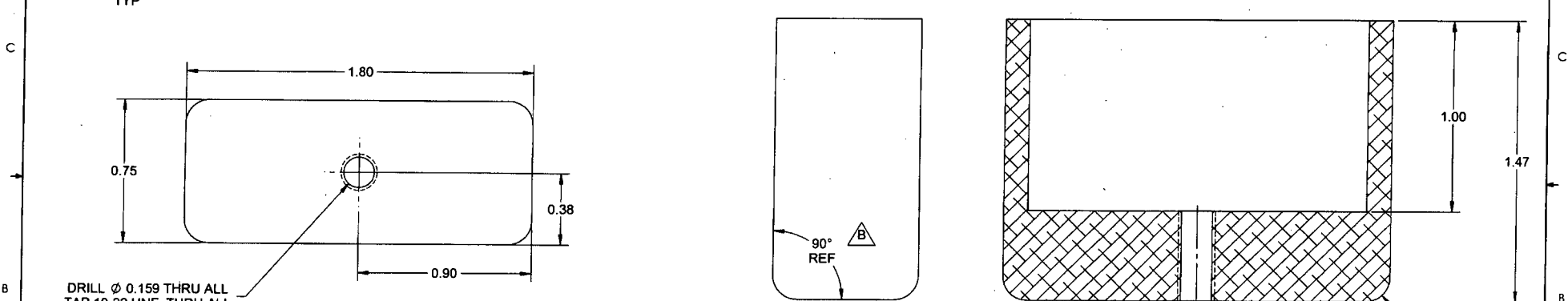
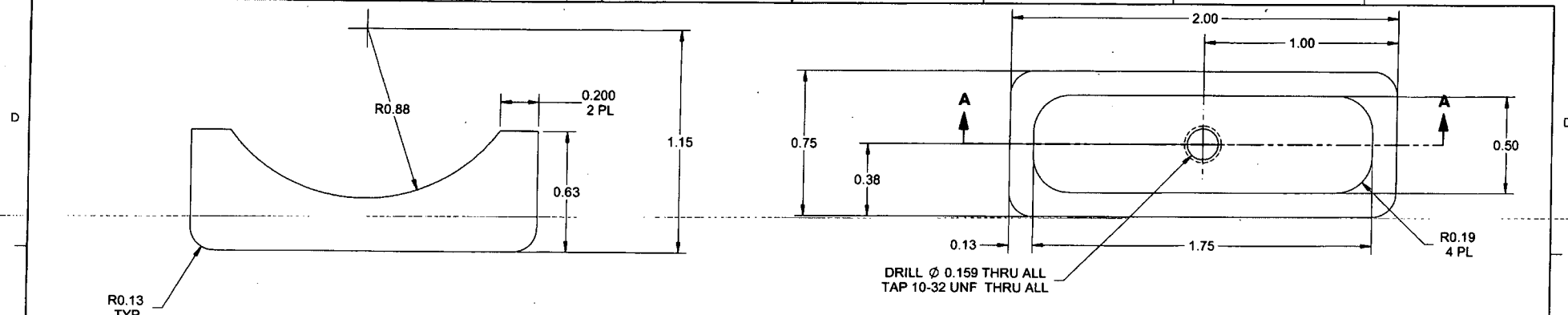


D3440-3 CLAMP
SUPERSEDES PREMIER P/N B67-43001-309

RELEASED
2014-12-08

B	RE-FORMAT DWG TO CURRENT STANDARD, 90° WAS 93° (ZN B4-2), 0.132 DEEP WAS 0.085 DEEP (ZN C4-4) REASON: FACILITATE MANUFACTURING	DB	14.07.22
A	NEW ISSUE	MB	05.08.02
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	MB	DRAWING NO.	REV. B
MFG. APPR.	MB	D3440	SHEET 1 OF 4
APPROVED	MB	TITLE	SCALE
DE APPR.	MB	BLADE FOLD KIT PARTS	NTS
DATE	14.07.22	COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

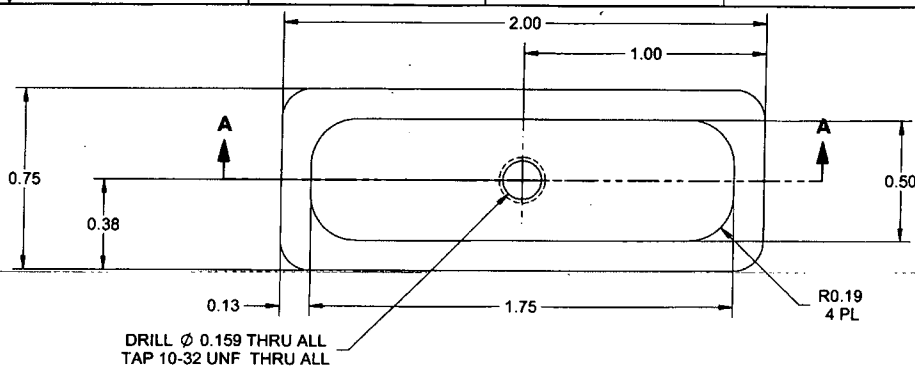
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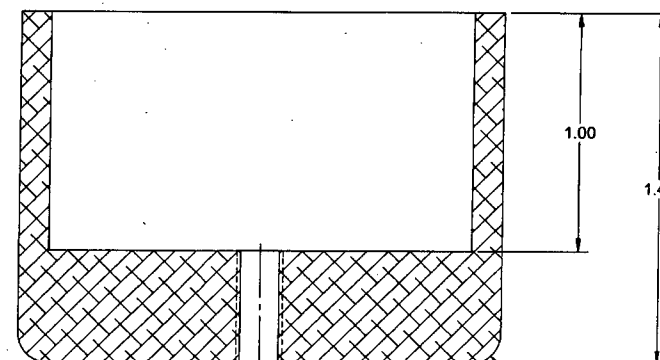
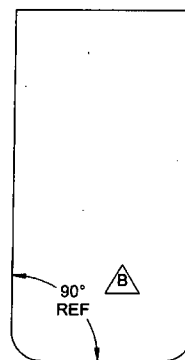
D3440-5 CONTOURED DETENT CLIP BASE
SUPERCEDES PREMIER P/N B67-43001-217

D3440-5-7 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
 PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
 OR PER AMS/QQ/A/200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B221
 REF. DART SPEC. M6061T6B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3440-5=0.05 lb
 D3440-7=0.13 lb



DRILL ϕ 0.159 THRU ALL
 TAP 10-32 UNF THRU ALL



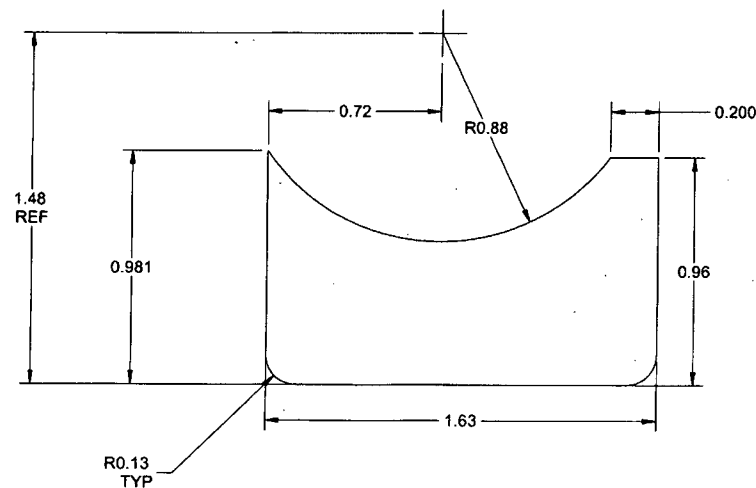
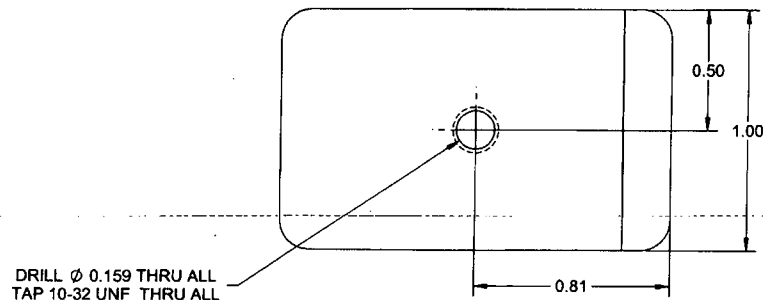
SECTION A-A

D3440-7 DETENT CLIP BASE
SUPERCEDES PREMIER P/N B67-43001-221

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 2014-12-08

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MFG. APPR.	MB	D3440	SHEET 2 OF 4
APPROVED	MB	TITLE	SCALE
DE APPR.	MB	BLADE FOLD KIT PARTS	NTS
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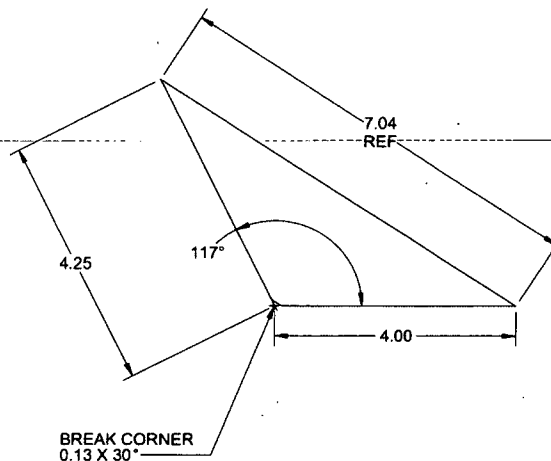
8 7 6 5 4 3 2 1



D3440-9 TUBE DETENT CLIP BASE
SUPERCEDES PREMIER P/N B67-43001-241

D3440-9 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR PER AMS-QQ/A/200/8 (OR AMS 4160) OR ASTM B211 OR ASTM B221
REF. DART SPEC. M6061T6B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.11 lb



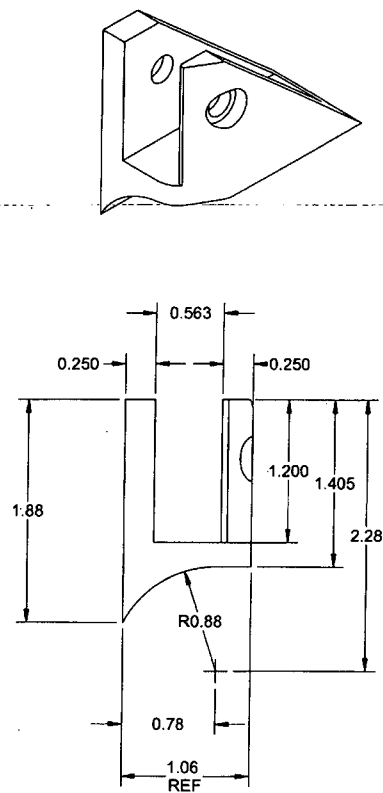
D3440-11 GUSSET

D3440-11 NOTES:

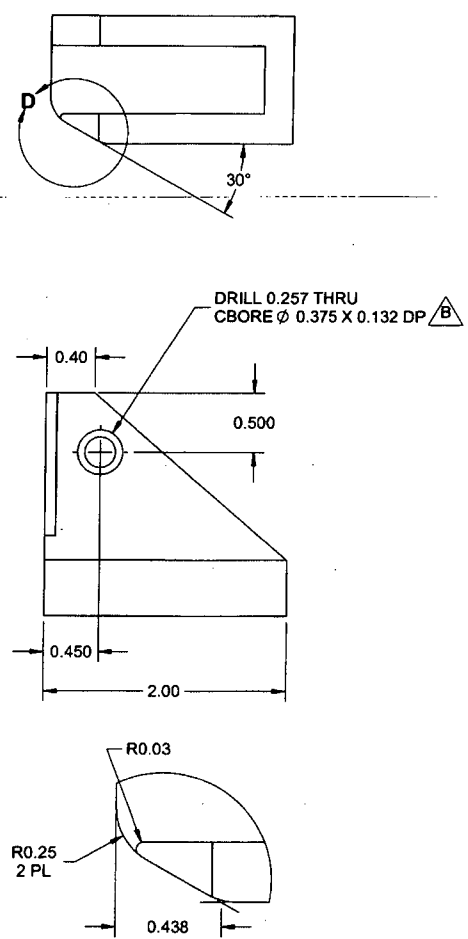
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ALUMINUM SHEET
PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209
REF. DART SPEC. M6061T6S.250
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.18 lb

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CHECKED	MB	DRAWING NO.	REV. B
MFG. APPR.	MB	D3440	SHEET 3 OF 4
APPROVED	MB	TITLE	SCALE
DE APPR.	NTS	BLADE FOLD KIT PARTS	NTS
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D3440-13 BRACKET
SUPERCEDES PREMIER P/N B67-43001-273



D3440-15 CONTOURED MALE EYE
SUPERCEDES PREMIER P/N B67-43001-215

D3440-13/-15 NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
 PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
 OR PER AMS/QT/A/200/8 (OR AMS 4180) OR ASTM B211 OR ASTM B221
 REF. DART SPEC. M6061T6B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3440-13=0.11 lb
 D3440-15=0.11 lb

DETAIL D
 SCALE 2X

DESIGN	MB	DART AEROSPACE LTD	
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CHECKED	DE	DRAWING NO.	REV. B
MFG. APPR.		D3440	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BLADE FOLD KIT PARTS	NT
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